CLAIMS:

1. A method for shaping a shared edge between two N-patches, comprising:

obtaining a first normal at a first shared vertex of the shared edge for one of the two N-patches;

obtaining a second normal at the first shared vertex of the shared edge for another of the two N-patches; and

computing a cross product for the first normal and the second normal to provide a first tangent, wherein the tangent provides a projection for determining the shared edge.

2. The method according to Claim 1, further comprising using the first tangent to shape the shared edge.

3. The method according to Claim 1, further comprising:

obtaining a third normal at a second shared vertex of the shared edge;

obtaining a fourth normal at the second shared vertex of the shared edge; and

computing a cross product for the third normal and the fourth normal to provide a second tangent.

4. The method according to Claim 1, wherein the second tangent provides another projection for determining the shared edge.

5. The method according to Claim 1, further comprising computing a modified

tangent using at least the first tangent and the first shared vertex.

6. The method according to Claim 1, further comprising determining at least one control point.

7. The method according to Claim 6, wherein the at least one control point influences shaping of the shared edge.

8. A method for geometry generation, comprising:

obtaining a model;

determining vector normals for the model;

converting the model to a higher-order form of the model;

identifying shared edges for the higher-order form of the model;

generating tangents for the higher-order form of the model responsive to the shared edges; and

shaping the shared edges at least partially responsive to at least one of the tangents.

9. The method according to Claim 8, wherein the model comprises polygons.

10. The method according to Claim 9, wherein the converting comprises converting the polygons to respective N-patch versions thereof.

11. The method according to Claim 10, further comprising:

determining dot products for respective normal pairs at shared vertices;

comparing the dot products to a threshold value; and

the generating the tangents responsive to the dot products not exceeding the threshold value.

12. The method according to Claim 11, wherein the converting comprises adding control points to the model.

13. The method according to Claim 12, further comprising shaping the shared edges partially responsive to at least one of the control points.

14. The method according to Claim 8, wherein the higher-order form of the model comprises Bezier patches.

15. A method for tessellation, comprising:

providing a tessellator;

providing an N-patch to the tessellator;

generating N-patches with the tessellator in response to the N-patch;

identifying for two of the N-patches a shared edge; and

ascertaining whether the shared edge should be creased.

16. The method according to Claim 15, wherein the ascertaining comprises:

computing a dot product, the dot product for a first normal of one of the two of the N-patches and a second normal of another of the two of the N-patches at a common vertex of the shared edge; and

comparing a scalar result of the dot product to a threshold value therefor.

17. The method according to Claim 16, further comprising:

responsive to a determination that the shared edge should be creased,

taking a cross product of the first normal and the second normal at the common vertex of the shared edge, wherein a tangent vector is generated; and

shaping the shared edge at least partially responsive to the tangent vector.

18. The method according to Claim 17, further comprising shaping the shared edge partially responsive to at least one control point of at least one of the two N-patches.

19. A method for shaping an edge shared between two N-patches, comprising:

obtaining a first normal at a first shared vertex of the shared edge for one of the two N-patches;

obtaining a second normal at the first shared vertex of the shared edge for another of the two N-patches; and

computing a dot product of the first normal and the second normal.

20. The method according to Claim 19, further comprising determining the shared edge is a line when the dot product is equal to one.

21. The method according to Claim 19, further comprising determining the shared edge is a line when the dot product is less than a threshold value.

22. The method according to Claim 19, further comprising computing a cross product for the first normal and the second normal when the dot product is not equal to one.

23. The method according to Claim 19, further comprising computing a cross

product for the first normal and the second normal when the dot product is greater than a threshold.